

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Computation of Revenue Requirement
CY 2020 - Placed in Service

		<u>CY 2020 - Placed in Service</u>			
1	Total Investment				\$ 11,197,805
2					
3	<u>Deferred Tax Calculation</u>				
4	Book Depreciation Rate			4.14%	
5	Federal Tax Depreciation Rate			4.91%	
6	FEDERAL Vintage Year Tax Depreciation:				
7		CY Spend			<u>\$549,790</u>
8	Annual Tax Depreciation				\$549,790
9					
10	STATE Vintage Year Tax Depreciation:				
11		CY Spend			<u>\$549,790</u>
12	Annual Tax Depreciation				\$549,790
13					
14	Book Depreciation				\$463,097
15					
16	Book/Tax Timer (Federal)				
17	less: Deferred Tax Reserve (State)				<u>\$6,675</u>
18	Net Book/Tax Timer (Federal)				(\$6,675)
19	Effective Tax Rate (Federal)				<u>21.00%</u>
20	Deferred Tax Reserve (Federal)				<u>(\$1,402)</u>
21	Book/Tax Timer (State)				\$86,693
22	Effective Tax Rate (State)				<u>7.70%</u>
23	Deferred Tax Reserve (State)				<u>\$6,675</u>
24	TOTAL Deferred Tax Reserve				<u><u>\$5,274</u></u>
25					
26	<u>Rate Base Calculation</u>				
27	Plant In Service				\$11,197,805
28	Accumulated Book Depreciation				(\$463,097)
29	Deferred Tax Reserve				<u>(\$5,274)</u>
30	Year End Rate Base				<u><u>\$10,729,434</u></u>
31					
32	<u>Revenue Requirement Calculation</u>				
33	Year End Rate Base				\$10,729,434
34	Pre-Tax ROR				<u>9.36%</u>
35	Return and Taxes				\$1,003,757
36	Book Depreciation				\$463,097
37	Property Taxes	3.06%			<u>\$328,482</u>
38	Annual Revenue Requirement				<u>\$1,795,336</u>
39					
40	Adjusted Annual Revenue Requirement				<u>\$1,795,336</u>
41					
42					
43	<u>Imputed Capital Structure</u>				
44		Ratio	Rate	Weighted Rate	Pre Tax
45	Long Term Debt	48.00%	5.97%	2.87%	2.87%
46	Common Equity	52.00%	9.10%	4.73%	6.49%
47					
48		<u>100.00%</u>		<u>7.60%</u>	<u>9.36%</u>

**Liberty Utilities (Granite State Electric) d/b/a Liberty
Project List
In Service as of December 31, 2020**

<u>Att. #</u>	<u>2020 Project #</u>	<u>Project Description</u>	<u>Priority</u>	<u>Total Spend¹</u>	<u>In Service</u>	<u>FERC</u>	<u>Book Rate</u>	<u>Book Amt</u>	<u>MACRS</u>	<u>Tax Amt</u>
Att. 2	8830-1933	Battery Pilot	4. Regulatory Programs	\$1,232,187	Various - 2020	371	10.00%	\$ 123,219	14.29%	\$ 176,079
Att. 3	8830-1946	2019 REP carryover ²	4. Regulatory Programs	\$743,565	Various 2019	364	3.64%	\$ 27,066	3.75%	\$ 27,884
Att. 4	8830-1958	Install Service to Tuscan Village South	3. Growth	\$2,708,566	Various - 2020	364	3.64%	\$ 98,592	3.75%	\$ 101,571
Att. 5	8830-1969	Mall Road Underground	2. Mandated	\$829,889	9/30/2020	364	3.64%	\$ 30,208	3.75%	\$ 31,121
Att. 6	8830-2011	Public Requirements Blanket	2. Mandated	\$1,035,602	Various - 2020	364	3.64%	\$ 37,696	3.75%	\$ 38,835
Att. 7	8830-2012	Damage/Failure Blanket	2. Mandated	\$1,426,525	Various - 2020	364	3.64%	\$ 51,925	3.75%	\$ 53,495
Att. 8	8830-2039	IE-NN URD Cable Replacement	5. Discretionary	\$467,957	Various - 2020	366	1.96%	\$ 9,172	3.75%	\$ 17,548
Att. 9	8830-2068	Main St Salem - Overhead Line Relocation	2. Mandated	\$1,309,994	12/8/2020	364	3.64%	\$ 47,684	3.75%	\$ 49,125
Att. 10	8830-2091	Meter Purchases	2. Mandated	\$847,194	Various 2020	370	1.96%	\$ 16,605	3.75%	\$ 31,770
Att. 11	8830-2092	Transformer Purchases	2. Mandated	\$596,327	Various 2020	368	3.51%	\$ 20,931	3.75%	\$ 22,362
Total				\$11,197,805				\$ 463,097	4.14%	\$ 549,790
										4.91%

¹ Projects that span multiple years may have a 2019 actual spend lower than the total project spend reported in the related Project Close-out Reports. Liberty will provide a breakdown of annual charges by project in each of the three step adjustment filings. The amounts shown here were provided by Liberty and are subject to review and Commission approval in the three individual step adjustment dockets. Italicized items have been updated for Exhibit 78.

² 8830-2051 Enhanced Bare Conductor Replacement was canceled. This project replaces 8830-2051 in this filing.

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Distribution increase due to Rate Case Expense and Recoupment
Effective For July 1, 2021

1	Rate Case Expense	\$565,077
2	Current Rate Case Expense Level	<u>\$553,642</u>
3	Difference in Current Rate Case Expense Rate Level	\$11,435
4	Actual Billed Revenues July 2019 - February 2020	\$28,169,453
5	Actual Billed Revenues March 2020 - June 2020	<u>\$13,052,360</u>
6	Total	\$41,221,813
7	Calculated July 2019 - June 2020 Revenue @ DE 19-064 Approved Rates	\$43,161,492
8	Estimated Recoupment Level per Settlement Agreement	\$1,835,991
9	Updated Estimated Recoupment (Line 7 - Line 6)	\$1,939,679
10	Difference in Estimated Recoupment Level per Settlement Agreement	\$103,688

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Distribution Increase for 20119 Step Adjustment
Effective July 1, 2021

[1] Increase in Annual Revenue Requirement	\$1,795,336
[2] Rate Case Expense	\$11,435
[3] Recoupment Reconciliation	\$103,688
[4] Distribution Revenues - Docket No. DE 19-064 & DE 21-049	\$46,803,543
[5] Total Revenue Increase	\$1,910,459
[6] Total Revenues	\$48,714,003
[7] Percentage of Adjustment to Distribution Rates	4.08%

[1] Page 1 line 40

[2] Page 3 line 3

[3] Page 3 line 11

[4] DE 19-064 - Final revenue calculation based on rates in effect 7/1/2020 of \$46,590,130 plus approved revenue requirement in DE 21-049 effective 5/1/2021 of \$213,246

[5] Sum of lines [1] through [3]

[6] Lines [1]+[2]+[3]+[4]

[7] Lines [5] / [4]

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Permanent Rate Design 2019 Step Adjustment
Rates Effective July 1, 2021

<u>Rate Class</u>	<u>Distribution Rate Component</u>	Rates Effective May 1, 2021 <u>Rates</u> (a)	2020 Capital Expenditures Step Adjustment % Increase/ % (Decrease) (b)	Proposed July 1, 2021 Base Distribution <u>Charges</u> (c)	REP/VMP Adjustment <u>Factor</u> (d)	July 1, 2021 <u>Rates</u> (e)
D	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	All kWh	\$0.05741	5.68%	\$0.06067	0.00064	\$0.06131
	16 Hour Off Peak kWh	\$0.04957	5.68%	\$0.05238	0.00064	\$0.05302
	Farm kWh	\$0.05419	5.68%	\$0.05726	0.00064	\$0.05790
	D-6 kWh	\$0.05049	5.68%	\$0.05335	0.00064	\$0.05399
D-10	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	On Peak kWh	\$0.12215	5.33%	\$0.12865	0.00064	\$0.12929
	Off Peak kWh	\$0.00165	5.33%	\$0.00173	0.00064	\$0.00237
D-11	Customer Charge	\$14.74		\$14.74		\$14.74
	Off Peak	\$0.03648		\$0.03855	0.00064	\$0.03919
	Mid Peak	\$0.05368		\$0.05673	0.00064	\$0.05737
	Critical Peak	\$0.09728		\$0.10280	0.00064	\$0.10344
EV	Customer Charge	\$11.35		\$11.35		\$11.35
	Off Peak	\$0.03648		\$0.03855	0.00064	\$0.03919
	Mid Peak	\$0.05368		\$0.05673	0.00064	\$0.05737
	Critical Peak	\$0.09728		\$0.10280	0.00064	\$0.10344
G-1	Customer Charge	\$428.73	4.08%	\$446.23		\$446.23
	Demand Charge	\$9.10	4.08%	\$9.47		\$9.47
	On Peak kWh	\$0.00582	4.08%	\$0.00605	0.00064	\$0.00669
	Off Peak kWh	\$0.00172	4.08%	\$0.00179	0.00064	\$0.00243
	Credit for High Voltage Delivery > 2.4 kv	(\$0.48)	4.08%	(\$0.50)		(\$0.50)
G-2	Customer Charge	\$71.46	4.08%	\$74.37		\$74.37
	Demand Charge	\$9.15	4.08%	\$9.52		\$9.52
	All kWh	\$0.00231	4.08%	\$0.00240	0.00064	\$0.00304
	Credit for High Voltage Delivery > 2.4 kv	(\$0.48)	4.08%	(\$0.50)		(\$0.50)
G-3	Customer Charge	\$16.43	4.08%	\$17.10		\$17.10
	All kWh	\$0.05205	4.08%	\$0.05417	0.00064	\$0.05481
M	Luminaire Charge					
	<u>Description</u>					
	HPS 4,000	\$8.42	4.08%	\$8.76		\$8.76
	HPS 9,600	\$9.73	4.08%	\$10.12		\$10.12
	HPS 27,500	\$16.14	4.08%	\$16.79		\$16.79
	HPS 50,000	\$20.07	4.08%	\$20.88		\$20.88
	HPS 9,600 (Post Top)	\$11.41	4.08%	\$11.87		\$11.87
	HPS 27,500 Flood	\$16.31	4.08%	\$16.97		\$16.97
	HPS 50,000 Flood	\$21.78	4.08%	\$22.66		\$22.66
	Incandescent 1,000	\$10.79	4.08%	\$11.23		\$11.23
	Mercury Vapor 4,000	\$7.47	4.08%	\$7.77		\$7.77

<u>Rate Class</u>	<u>Distribution Rate Component</u>	<u>Rates Effective May 1, 2021 Rates</u> (a)	<u>2020 Capital Expenditures Step Adjustment % Increase/ % (Decrease)</u> (b)	<u>Proposed July 1, 2021 Base Distribution Charges</u> (c)	<u>REP/VMP Adjustment Factor</u> (d)	<u>July 1, 2021 Rates</u> (e)
	Mercury Vapor 8,000	\$8.39	4.08%	\$8.73		\$8.73
	Mercury Vapor 22,000	\$14.99	4.08%	\$15.60		\$15.60
	Mercury Vapor 63,000	\$25.32	4.08%	\$26.35		\$26.35
	Mercury Vapor 22,000 Flood	\$17.15	4.08%	\$17.85		\$17.85
	Mercury Vapor 63,000 Flood	\$33.21	4.08%	\$34.56		\$34.56
LED-1	<u>LED-1 Fixtures</u>					
	30 Watt Pole Top	\$5.46	4.08%	\$5.68		\$5.68
	50 Watt Pole Top	\$5.69	4.08%	\$5.92		\$5.92
	130 Watt Pole Top	\$8.79	4.08%	\$9.14		\$9.14
	190 Watt Pole Top	\$16.82	4.08%	\$17.50		\$17.50
	30 Watt URD	\$12.72	4.08%	\$13.23		\$13.23
	90 Watt Flood	\$8.65	4.08%	\$9.00		\$9.00
	130 Watt Flood	\$9.94	4.08%	\$10.34		\$10.34
	30 Watt Caretaker	\$4.90	4.08%	\$5.10		\$5.10
	<u>Rates M, LED-1 & LED-2 Pole Accessory Charge</u>					
	Pole -Wood	\$9.51	4.08%	\$9.90		\$9.90
	Fiberglass - Direct Embedded	\$9.92	4.08%	\$10.32		\$10.32
	Fiberglass w/Foundation <25 ft	\$16.73	4.08%	\$17.41		\$17.41
	Fiberglass w/Foundation >=25 ft	\$27.97	4.08%	\$29.11		\$29.11
	Metal Poles - Direct Embedded	\$19.94	4.08%	\$20.76		\$20.76
	Metal Poles with Foundation	\$24.05	4.08%	\$25.03		\$25.03
	<u>Rate M, LED-1</u>					
	All kWh	\$0.04003	4.08%	\$0.04166	0.00064	\$0.04230
	<u>Rate LED-2</u>	\$0.04003	4.08%	\$0.04166	0.00064	\$0.04230
T	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	All kWh	\$0.04657	5.06%	\$0.04892	0.00064	\$0.04956
V	Minimum Charge	\$16.43	4.08%	\$17.10		\$17.10
	All kWh	\$0.05354	4.08%	\$0.05572	0.00064	\$0.05636

Rates D-11 and EV are calculated through the TOU model approved in Docket DE 17-189.

**Liberty Utilities (Granite State Electric) d/b/a Liberty
Bill Calculation**

Usage	650	kWh	Rate Effective May 1, 2021	July 1, 2021 Proposed Rates	Current Bill	July 1, 2021 Proposed Bill
			(a)	(b)		
Customer Charge			\$14.74	\$14.74	\$14.74	\$14.74
Distribution Charge						
All kWh			\$0.05805	\$0.06131	\$37.73	\$39.85
Storm Recovery Adjustment			\$0.00000	\$0.00000	\$0.00	\$0.00
Transmission Charge			\$0.03703	\$0.03703	\$24.07	\$24.07
Stranded Cost Charge			(\$0.00080)	(\$0.00080)	-\$0.52	-\$0.52
System Benefits Charge			\$0.00678	\$0.00678	\$4.41	\$4.41
Electricity Consumption Tax			\$0.00000	\$0.00000	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Retail Delivery Services					\$80.43	\$82.55
Energy Service Charge			\$0.06426	\$0.06426	<u>\$41.77</u>	<u>\$41.77</u>
				Total Bill	\$122.20	\$124.32
						\$2.12
						1.73%

(a) Rates effective May 1, 2021, per Docket No. DE 21-049

(b) Rates proposed